

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Claim 1 (currently amended): A vacuum fixer for adhering onto an adhered surface having fine cracks or indented portions, comprising:

a hat-shaped pressing plate made of rigid synthetic resin;

a disk-type suction plate made of soft synthetic resin and covered with the pressing plate and having a first diameter and an inclined lift surface, wherein the suction plate is configured to contact the adhered surface when the vacuum fixer is adhered to the adhered surface;

a screw shaft mounted on the upper end of the center of the suction plate and perforating the center of the pressing plate;

a vacuum wall being made of gel-type polyurethane and formed at the edge of the pressing plate, and having a second diameter greater than the first diameter, wherein the vacuum wall (a) includes an inclined compression surface that is configured to slide along the inclined lift surface of the suction plate during the adhering of the vacuum fixer onto the adhered surface, (b) fills the vacuum wall filling the fine cracks or the indented portions during the adhering of the vacuum fixer onto the adhered surface, and (c) is configured to contact the adhered surface when the vacuum fixer is adhered to the adhered surface; and

a screw tightening member coupled to a protruding front end of the screw shaft, shaft

wherein the vacuum wall is made of a gel-type polyurethane formed by mixing a diol compound having a molecular weight of 4,000 ~ 6,000 with methylene-diisocyanate in the ratio of 1 : 8 to 1 : 12.

Claim 2 (cancelled).

Claim 3 (previously presented): The vacuum fixer according to claim 1, wherein the vacuum wall is in the form of a right-angled triangle where the ratio of the height to the base line is 1 : 1.5 to 1 : 1.8.

Claim 4 (previously presented): The vacuum fixer according to claim 1, wherein a central part of the suction plate is four to five times thicker than a circumferential part of the suction plate.

Claim 5 (currently amended): A vacuum fixer for adhering onto an adhered surface having fine cracks or indented portions, comprising:

a hat-shaped pressing plate made of rigid synthetic resin;

a disk-type suction plate made of soft synthetic resin and covered with the pressing plate and having a first diameter an inclined lift surface, the suction plate being configured to contact the adhered surface when the vacuum fixer is adhered to the adhered surface;

a screw shaft mounted on the upper end of the center of the suction plate and perforating the center of the pressing plate;

a vacuum wall being made of gel-type polyurethane and formed at the edge of the pressing plate, and having a second diameter greater than the first diameter, wherein the vacuum wall (a) includes an inclined compression surface that is configured to slide along the inclined lift surface of the section plate during the adhering of the vacuum fixer onto the adhered surface, (b) fills the vacuum wall filling the fine cracks or the indented portions during the adhering of the vacuum fixer onto the adhered surface, and (c) is configured to contact the adhered surface when the vacuum fixer is adhered to the adhered surface; and

a screw tightening member coupled to a protruding front end of the screw shaft, wherein the screw tightening member has a grip formed on the upper end thereof, thereof

wherein the vacuum wall is made of gel-type polyurethane that is 150 ~ 250 cps in viscosity.

Claim 6 (cancelled).

Claim 7 (previously presented): The vacuum fixer according to claim 1, wherein the vacuum wall is formed at the edge of the pressing plate in such a manner as to protrude outwardly from the bottom surface of the pressing plate toward the adhered surface.

Claim 8 (cancelled).

Claim 9 (currently amended): The vacuum fixer according to Claim 1-claim 8, wherein the pressing plate has a co-centric circular saw-toothed type contact protrusion formed on an inner surface of the pressing plate in such a manner as to be positioned at an inner portion of the vacuum wall.

Claim 10 (currently amended): The vacuum fixer according to claim 9, wherein ~~the suction plate has a central part, an inclined part and a circumferential part, the circumferential part having an inclined lift surface formed on the peripheral edge of the suction plate and overlapped with an inclined compression surface of the pressing plate, the inclined lift surface of the suction plate has~~ having a gradually narrowed upper portion and a gradually widened lower portion.

Claim 11 (previously presented): The vacuum fixer according to claim 1, wherein the screw tightening member has a hanger formed on an upper end of the screw tightening member.

Claim 12 (new): A vacuum fixer comprising:

 a pressing plate that is made of a first material, the pressing plate having an exterior surface and an interior surface;

a suction plate that is made of a second material that is softer than the first material, and that has an exterior surface and an interior surface, wherein (a) the exterior surface of the suction plate faces the interior surface of the pressing plate and (b) the interior surface of the suction plate is configured to be adhered to an adhered surface;

a vacuum wall made of a third material that is different than the first and second materials, wherein the vacuum wall (a) is coupled to the interior surface of the pressing plate, (b) has a foot portion that is configured to be adhered to the adhered surface in a circumferential area that surrounds the suction plate, and (c) has a triangle portion that is wedged between the interior surface of the pressing plate and the exterior surface suction plate; and

a plurality of saw-toothed type contact protrusions that extend from the interior surface of the pressing plate and that engage the exterior surface of the suction plate.